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File Code: 3410 **Date:** October 23, 2009
Route To:

Subject: Cibola NF 2009 Forest Insect and Disease Aerial Survey Results (magdalenard) (mounttaylorrd) (mountainairrd) (sandiard)

To: Forest Supervisor, Cibola National Forest

During July 21 through July 28, Crystal Tischler, of our staff, conducted the annual insect and disease survey flights over the Cibola National Forest including private lands within the administrative boundary of the Forest, and tribal lands of the Acoma and Zuni Pueblos and the Ramah Navajo. Gallinas Peak was flown on August 3 by Crystal Tischler and Daniel Ryerson of our staff. Crystal started with our staff in September 2008 and will be taking on the role of primary surveyor in New Mexico. This year was a period of transition as Crystal, who had previous aerial survey experience in Colorado, became familiar with New Mexico's forest types, topography, and our survey procedures. While we strive to make our surveys as consistent as possible, mapping styles vary slightly between observers.

A map and table summarizing the surveys are enclosed. Copies of this letter, map, and table have been forwarded to the respective districts of your Forest. Following is a brief summary of the survey results:

Lands within the Cibola National Forest Administrative Boundary

Western spruce budworm defoliation was observed on approximately 7,000 acres of the Mount Taylor Ranger District. Defoliation in piñon woodlands by piñon needle scale was observed across 7,500 acres of the San Mateo and Luera Mountains. Bark beetle activity overall decreased this last year.

Example of Diplodia blight on ponderosa pine in the Zuni Mountains.

Diplodia blight, a foliar disease of a wide range of pine species, was detected across nearly 1,600 acres in the Zuni Mountains and on east side of Mount Taylor (see example on right). This disease has caused widespread branch flagging on some topkill in ponderosa pines in the affected areas. For more about diplodia blight, see the Forest and Insect Disease Leaflet #161 (available on-line at: http://www.na.fs.fed.us/spfo/pubs/fidls/diplodia/diplodiafidl.htm). On Chivato Mesa, 1,610 acres of oak dieback was noticed, primarily on private land to the east of the Cibola NF; this damage has not been ground checked for a casual agent.

The amount of aspen defoliation observed continues to decline from slightly over 1,000 acres last year to just 380 acres this year. We have continued our effort to distinguish aspen defoliation from aspen mortality and decline. This year approximately 4,500 acres were mapped with some level of aspen decline. Most of the aspen stands in poor health were observed on the Mount Taylor RD. Crystal's previous experience surveying in Colorado heightened her awareness of aspen decline. This year she observed more areas with aspen decline than we had been previously mapping. While the numbers alone show a significant increase from 2007 - 2008, this should not be interpreted as a large aspen mortality event. The areas mapped during 2007 - 2008 typically had substantial levels of mortality. The additional areas mapped this year include aspen stands with varying levels of mortality, including stands with dying crowns, one of the early indications of decline in a stand (see examples below). We will continue to refine our mapping of aspen as we learn more about the health of this species in the Southwest.

Example of aspen stands with substantial mortality in the Zuni Mountains that were been mapped over the past two years.

Mt. Taylor example of an earlier stage of aspen decline with scattered tree mortality additionally mapped this year.

Tribal Lands

Western spruce budworm was the most widespread activity affecting 290 acres on the Laguna Indian Tribal lands. The bark beetle activity observed on tribal lands in 2009 was insignificant. There was an increase in the amount of aspen decline recorded due to the inclusion of stands with low mortality as described earlier.

The enclosed map and table provide additional detail. The GIS data files are available at: http://www.fs.fed.us/r3/gis/nm_data.shtml. If you have questions regarding the survey or the data, please contact either of our observers: Daniel Ryerson at (505) 842-3285, dryerson@fs.fed.us or Crystal Tischler, at (505) 842-3284, cgtischler@fs.fed.us.

/s/ Debra Allen-Reid
DEBRA ALLEN-REID
New Mexico Zone Leader, Forest Health

Enclosures: table and map

cc: Dennis Aldridge
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Hardcopy of letter, map, and table to:
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